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## A Message from the Editors

It is our pleasure to launch this new international journal “Journal of Uncertain Systems” (JUS) with World Academic Press, UK. Our initiative was motivated by a strong support from the research community on uncertainty analysis, especially in artificial intelligence, with regard to a specific journal devoted to research and applications on systems (physical and social) in which various types of uncertainty coexist.

In today applications of technologies, uncertainty in various forms is present in gathered information. This is typical in the desire to build machines which can exhibit human remarkable capability of intelligence, mainly in decision-making, in both physical and social sciences, where we are driven to examine how humans use perception-based information to arrive at decisions. For example, it is in the scientific spirit of “goals”, “data available” and “tools needed” (in this order) that the concept of random fuzzy sets appear as indispensable data in information processing for building intelligent systems. These include intelligent control, pattern discovery, data mining, decision-making in social problems.

In complex situations where uncertainty in data, such as imprecise probabilities, incomplete information, missing information, fuzziness in natural language description of meaning, and uncertain occurrences of events, there is a need to enlarge the domain of applicability of the traditional theory of statistics. Recent decades have witnessed this trend of enlarging its solid inference procedures to new types of data, such as coarse data, i.e., data with low quality, exemplified by standard situations in medical statistics and biostatistics where data are censored, grouped or imprecise. Also, in the field of Bioinformatics, data cannot be observed directly, where models like Hidden Markov processes could be used.

The main objective of launching a new journal on uncertain systems is twofold. Firstly, such a journal will promote the research and development of uncertainty theory in its most general framework. Secondly, it will advance the applications of uncertainty theory to a new stage, especially in uncertain programming, such as stochastic programming, and random and fuzzy programming. The new journal will also provide a forum for research awareness of advanced theoretical results to enlarge the research repertoire of tools and techniques for real-world applications.

We hope the Journal of Uncertain Systems will become a major international forum for researchers to exchange their research results and applications of uncertain systems.